

**IN THE CLAIMS**

Please amend the claims as follows:

1. (previously presented) A method of operating an imaging device with a two-dimensional field of image sensors as well as an evaluation unit which is capable of reading out and processing the pixel signals, representing output signals of image sensors combined by a binning operation, at a maximum rate of no more than  $G_{\max}$ , comprising:

presetting, on said imaging device, at least one parameter in order to define a sub-region of the field; and

deriving, by said imaging device, any remaining parameters for defining the sub-region as well as a binning factor  $b$  and an imaging rate  $f$ , said deriving being performed, in view of the at least one preset parameter, in such a manner that the maximum rate  $G_{\max}$  of the evaluation unit is not exceeded during the reading out of all pixel signals from the sub-region.

2. (currently amended) The method as claimed in claim 1, ~~characterized in that~~wherein the image sensors are arranged in a periodic pattern in a rectangular field, the sub-region having a rectangular shape with its sides extending parallel to the edges of the field.

3. (currently amended) The method as claimed in claim 1, ~~characterized in that~~wherein the image sensors are X-ray sensors.

4. (currently amended) ~~A~~The method of claim 1

~~operating an imaging device with a two-dimensional field of image sensors as well as an evaluation unit which is capable of reading out and processing the pixel signals, representing output signals of image sensors combined by a binning operation, at a maximum rate of no more than  $G_{max}$ , in which method~~  
~~—at least one parameter is preset in order to define a sub-region of the field,~~  
~~—any remaining parameters for defining the sub-region as well as a binning factor  $b$  and an imaging rate  $f$  are defined in such a manner that the maximum rate  $G_{max}$  of the evaluation unit is not exceeded during the reading out of all pixel signals from the sub-region, characterized in that the said device having a service mode, said sub-region is being preset in the said service mode of the imaging device.~~

5. (previously presented) The method as claimed in claim 1, wherein said deriving comprises following, by said imaging device, specified rules in conformity with which variables are changed relative to their current values in order to ensure that the maximum rate  $G_{max}$  is adhered to.

6. (currently amended) A method ~~of as claimed in claim 1~~ operating an imaging device with a two-dimensional field of image sensors as well as an evaluation unit which is capable of reading out and processing the pixel signals, representing output signals of image sensors combined by a binning operation, at a maximum rate of no more than  $G_{max}$ , in which method  
~~—at least one parameter is preset in order to define a sub-region of the field,~~

~~any remaining parameters for defining the sub-region as well as a binning factor  $b$  and an imaging rate  $f$  are defined in such a manner that the maximum rate  $G_{\max}$  of the evaluation unit is not exceeded during the reading out of all pixel signals from the sub-region, characterized in that the evaluation of the pixel signals is being performed by means of calibration images related to the sub-region.~~

7. (currently amended) The method as claimed in claim 6, ~~characterized in that~~wherein:  
\_\_\_\_\_ sub-regions are selected which cover the entire field of the image sensors;  
\_\_\_\_\_ for each of the sub-regions related calibration images are generated with predetermined imaging parameters;  
\_\_\_\_\_ from the calibration images of the sub-regions there are generated overall calibration images for the imaging parameters which are related to the entire field of image sensors; and  
- \_\_\_\_\_ calibration images for an arbitrary new sub-region are acquired from the overall calibration images.

8. (currently amended) The method as claimed in claim 6, ~~characterized in that~~wherein  
dark images of the sub-region are generated and used as calibration images.

9. (previously presented) An imaging device which includes a two-dimensional field of image sensors as well as an evaluation unit which is capable of reading out and processing the pixel signals, representing output signals of image sensors combined by a

binning operation, at a maximum rate of no more than  $G_{\max}$ , the imaging device being configured to enable presetting of at least one parameter in order to define a sub-region of the field, and further configured for deriving any remaining parameters for defining the sub-region as well as a binning factor  $b$  and an imaging rate  $f$ , said deriving being performed, in view of the at least one preset parameter, in such a manner that the maximum rate  $G_{\max}$  of the evaluation unit is not exceeded during the reading out of all pixel signals from the sub-region.

10. (currently amended) An imaging device as claimed in claim 15 ~~which includes a two-dimensional field of image sensors as well as an evaluation unit which is capable of reading out and processing the pixel signals, representing output signals of image sensors combined by a binning operation, at a maximum rate of no more than  $G_{\max}$ , the imaging device being arranged~~  
~~— to enable the presetting of at least one parameter in order to define a sub-region of the field;~~  
~~— to define any remaining parameters for defining the sub-region as well as a binning factor  $b$  and an imaging rate  $f$  in such a manner that the maximum rate  $G_{\max}$  of the evaluation unit is not exceeded during the reading out of all pixel signals from the sub-region,~~  
~~— characterized in that the imaging device comprises, further comprising:~~  
                    a beam path; and

\_\_\_\_\_ an X-ray apparatus with an adjustable diaphragm arrangement in the beam path, said arrangement including an adjustable diaphragm device, said apparatus being configured such that at least one adjustment parameter of the said diaphragm device is among said at least one preset parameter being presettable while any remaining adjustment parameters are automatically set.

11. (previously presented) The method as claimed in claim 1, wherein said any remaining parameters amount to one or more parameters.

12. (currently amended) The method as claimed in claim 4, wherein said ~~operating,~~  
~~including the defining in said such a manner deriving of the factor b and the rate f occurs~~  
in a mode distinct from said service mode.

13. (previously presented) The method as claimed in claim 1, wherein said deriving comprises calculating one or more parameters from among said binning factor, said imaging rate, and said remaining parameters.

14. (previously presented) The imaging device as claimed in claim 9, wherein said deriving comprises calculating one or more parameters from among said binning factor b, said imaging rate f, and said remaining parameters.

15. (new) An imaging device comprising:

a two-dimensional field of image sensors, said field being divided into pixels for outputting pixel signals representing output signals of said image sensors combined by a binning operation at a binning factor of unity or greater; and

an evaluation unit configured for, at a maximum rate of no more than  $G_{\max}$ , reading out and processing said pixel signals,

said imaging device being configured to enable presetting of at least one parameter in order to define a sub-region of said field, said sub-region comprising less than all of said field, but a plurality of said pixels,

said imaging device being further configured for, based on said at least one preset parameter and on said maximum rate  $G_{\max}$ , deriving a) any parameters for defining the sub-region that were not preset in said presetting, b) said binning factor, and c) an imaging rate.

16. (new) A method for making an imaging device comprising:

providing a two-dimensional field of image sensors;

configuring said device so that said field is dividable into pixels for outputting pixel signals representing output signals of said image sensors combined by a binning operation at a binning factor of unity or greater;

configuring an evaluation unit capable of reading out and processing said pixel signals, but at no more than a maximum rate of  $G_{\max}$ ,

further configuring said device for presetting at least one parameter in order to define a sub-region of said field, said sub-region comprising less than all of said field, but a plurality of said pixels; and

further configuring said device for, based on said at least one preset parameter and on said maximum rate  $G_{\max}$ , deriving, by said device, a) any parameters for defining the sub-region that were not preset in said presetting, b) said binning factor, and c) an imaging rate.

17. (new) The method as claimed in claim 16, wherein said parameters for defining the sub-region that were not preset in said presetting amount to one or more parameters.

18. (new) The method as claimed in claim 16, wherein said deriving comprises calculating one or more parameters from among said binning factor, said imaging rate, and said parameters for defining the sub-region that were not preset in said presetting.

19. (new) An article of manufacture, comprising a machine-accessible medium having instructions encoded thereon for enabling a processor to perform the method of claim 1.

20. (new) A computer software product for use with an evaluation unit capable of reading out and processing pixel signals of a two-dimensional field of image sensors at a maximum rate of no more than  $G_{\max}$ , said field being dividable into pixels for outputting said pixel signals representing output signals of said image sensors combined by a

binning operation at a binning factor of unity or greater, said product comprising a computer readable medium embodying a computer program that includes instructions executable by a processor to perform a plurality of acts, said plurality comprising the acts of:

presetting at least one parameter in order to define a sub-region of the field, said sub-region comprising less than all of said field, but a plurality of said pixels;  
and

based on said at least one preset parameter and on said maximum rate  $G_{\max}$ , deriving, by said imaging device, a) any parameters for defining the sub-region that were not preset in said presetting, b) said binning factor, c) an imaging rate.